ABSTRACT OF THE DISCLOSURE

In a sensing apparatus, and a control method of a sensing apparatus, the sensing apparatus includes a fluxgate including a driving coil for exciting a magnetic substance core with a current, first and second current amplifiers for applying the current to first and second ends of the driving coil, a pulse generator for generating a pulse to turn on/off the first and second current amplifiers, and a pulse controller for outputting a control signal allowing the pulse to be applied to the first and second current amplifiers, the pulse controller outputting the control signal at a start of a sensing cycle, the fluxgate generating an analog signal due to the excited magnetic substance, and an A/D converter for converting the analog signal from the fluxgate into a digital signal, wherein the pulse controller stops outputting the control signal when the A/D converter outputs the digital signal to the pulse controller.